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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,039	08/30/2001	Hidetoshi Nishi	381AS/50328	7304

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EXAMINER


GOETZ, JOHN S

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/942,039	Applicant(s) NISHI ET AL. 	
	Examiner John S. Goetz	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9 and 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                            | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment has been received and entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

3. Claims 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 1, 9, and 14-21 confusingly recite the limitation "the axial positions." Similarly, claims 5 and 7 confusingly recite the limitation "the desired positions." Because these limitations could refer either to (1) the work roll axial position or (2) the intermediate roll axial position, they are vague and indefinite and lack proper antecedent basis.

### ***Claim Rejections - 35 USC § 103***

5. Claims 1, 2, 4, 5, 7-9, 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiruta et al. (5,622,073 – hereinafter Hiruta) in view of Kajiwaka (3,857,268 – hereinafter Kajiwaka '268 ).
6. As explained in the previous Office action, Hiruta substantially discloses the method and apparatus of these claims. Hiruta only lacks that the axial positions of the work rolls are fixed and not moved while a material of constant width is being rolled. Kajiwaka '268, in the art of strip rolling, discloses a rolling apparatus very similar to the one seen in Hiruta. Furthermore Kajiwaka '268 discloses that the work rolls are shifted only when the width of the rolled material changes (see column 3, lines 17-21 stating "[a]s the plate width of the rolled material changes

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successively . . . the working roll axis is shifted accordingly.”) Additionally, Kajiwaka ‘268 clearly discloses in Figs 3i-3iv and column 3, lines 4-25, that the axial position of the working rolls is not changed while the width of the material remains constant. Finally, Kajiwaka ‘268 discloses that such a method of rolling allows for the effective and accurate control the flatness of the rolled strip (column 2, lines 5-10). Thus, it would have been obvious to one of skill in the art at the time of the invention to add the steps of fixing the axial positions of the work rolls during rolling and shifting the axial positions of the work rolls based differing widths of subsequently rolled material, as suggested by Kajiwaka ‘268.

7. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiruta and Kajiwaka (3,857,268), as applied above, further in view of Kajiwaka (6,286,354 – hereinafter Kajiwaka ‘354). Claims 6 and 21 add that the stand is reversible. As explained in the previous office action, Kajiwaka ‘354 discloses, in a very similar strip rolling operation, that a reversible mill is advantageous for its low start up cost and its ability to be easily expanded (column 15, lines 62-67). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rolling apparatus and method taught by Hiruta and Kajiwaka ‘268 with the ability to be reversible, in order to reduce costs while simultaneously increasing flexibility, as suggested by Kajiwaka ‘354.

### ***Response to Arguments***

8. Applicant’s argument, see amendment filed 16 January 2003, with respect to the rejection of claim 11 under 35 USC 112 has been fully considered and is persuasive. The rejection is withdrawn.

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10. Applicant's argument that Hiruta does not disclose fixing the work rolls during rolling is moot in view of the new grounds of rejection.

11. Applicant's remaining arguments regarding the Hiruta reference are not persuasive. First applicant suggests that Hiruta is directed only to a highly rigid rolling mill that decrease plate meander. However, as stated in column 1, lines 10-19, the focus of the Hiruta invention is "in particular, to precisely control a sheet crown" which is defined to include "the difference in the sheet thickness" and which prevents "edge drop."

12. Applicant next asserts that Hiruta does not suggest a consideration of or solution to the problem of edge drop variations while rolling strips of the same width. However, Hiruta does disclose the solution to the problem of edge drop variations while rolling strip by, *inter alia*, axial shifting the intermediate rolls (see column 7, lines 9-18).

13. Applicant's argument regarding the the Kajiwara '646 reference is moot because the Kajiwara '646 is no longer relied on.

14. Applicant's argument regarding the Kajiwara '345 reference is not persuasive. The reference is relied only to teach the advantages of reverse rolling.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Goetz whose telephone number is 703-308-1411. The examiner can normally be reached on Mon, Tues, Thurs, Fri 7:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can be reached on 703-308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3579 for regular communications and 703-305-3579 for After Final communications.

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3136.

JSG  
March 31, 2003



**ALLEN OSTRAGER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**